FACTS

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MARKETING -- THE KEY TO SUCCESS IN RESOURCE RECOVERY

When he wasn't involved in writing his Canterbury Tales, Geoffrey Chaucer occupied himself as clerk of works for Westminster Palace by collecting scrap metal for re-use.

While he made his name as a pirate, when the infamous Captain Kidd was captured in 1699, he was hauling a cargo of 10 tons of scrap iron for colonial iron works.

Paul Revere, a silversmith as well as an early freedom rider, constantly advertised in the colonial press for scrap metal.

The pioneers of recycling, whether they were unknown, famous or infamous, all tackled their work with a common goal -- to make enough money to stay in business.

Determination is not enough:

In Ontario, the Ministry of the Environment has launched an intensive program of waste and reclamation research, with a new laboratory for practical waste recovery study -- The Experimental Plant for Resource Recovery. The provincial program will, over the next 15 years, develop reclamation plants across the province.

In this comprehensive program, and in the many recycling programs started over the years by citizen groups and municipalities, the key to success has not changed since Chaucer's day.

Success in any recycling or reclamation program is getting reclaimed material and energy from garbage back into productive use. Without a market, there can be no recycling of goods.

Furthermore, there are costs involved in either recycling or reclamation -- collection, land, facilities, handling and processing and transportation. Some of these costs can be written off to a good cause by volunteer labor in a small scale operation, but in the final analysis, the survival of a reclamation program depends on recovering costs through marketing.

One of the functions of the Experimental Plant for Resource Recovery is to develop and prove markets for recovered materials. The Ministry's study indicates clearly that flexibility is essential, so that products can be directed to any one of a number of markets to realize the best price for each commodity.

However, the products obtained through resource recovery must not merely displace existing materials already being recycled. Present markets must be expanded and new uses and markets for recovered materials have to be developed. This means that resource recovery will complement and expand the present role of the secondary materials industry.

These are some of the existing and potential markets for reclamation:

Corrugated cardboard:

This can be collected readily in a depot operation or in commercial pickups. Present prices range up to $50 per ton and the current steady demand could rise with increased capacity on the part of major users.

Newsprint waste:

Bundled or shredded newsprint has a number of existing markets within the paper industry, and other potential markets. The price that waste paper dealers pay depends entirely on the market demand for this material; unfortunately, this demand fluctuates a great deal. Insulation manufacturers now use 6,000 tons a year but the potential future use is much greater.

A relatively new market is offered in agricultural bedding, with a current production of 2,500 tons a year. Straw, sawdust and corn cobs, now extensively used in this market, are getting expensive and in short supply. Agricultural bedding can, in turn, be used as a soil conditioner and fertilizer with some nutrient value.

Air separated combustibles:

About 40 per cent of the garbage processed in a front-end resource recovery plant is in the form of air-separated combustibles suitable for use as a fuel. There are a number of potential fuel markets.

Cement industry representatives are joining the Ministry in a demonstration project involving the use of fiber fuel from resource recovery in a full scale cement kiln operation.

The shredded refuse fuel fraction may be useful in promoting sludge dewatering and adding heat value for incineration in some areas. The high paper content would reduce moisture levels and allow self-sustaining combustion. One Ontario municipality, for example, spends more than $200,000 a year for natural gas for firing roasters in sludge processing. Refuse fuel could replace this fuel.

Ferrous metal:

It has been claimed that Canada is short about 1,000,000 tons of ferrous scrap every year. Steel reclaimed from all municipal waste in Ontario offers a potential 375,000 tons a year to offset this shortage.

The Ministry is exploring and developing markets for ferrous metals in detinning plants, iron foundries, the basic steel industry, and steel foundries.

Glass:

The glass industry in Ontario has maintained a steady market for glass from municipal and private recycling operations with prices, delivered at the plant, ranging from $10/ton for mixed glass to $20/ton for glass sorted as to color.

The Ministry and the industry will be evaluating the potential of a glass fraction separated in Resource Recovery when the Experimental plant is in operation. Other potential uses for this glass fraction include bulk applications for production of various building materials.

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